

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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APPLICANT : RES DEV CORP OF JAPAN;

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C12P 21/08 // C12N 5/10 (C12P 21/08  
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C12R 1:91 )

TITLE : ANTIBODY CDNA

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10      20      30      40      50
5' GAGGTGACAC TTTTGGAGTC TGGGAGAGC TTGGTACAGC CTGGGGGTC
60      70      80      90     100
CCTGAGACTC TCTTGAGCAG CCTCTGGATT CACCTTTAGC AGCTATGGCA
110     120     130     140     150
TGAGCTGGGT CCGCCGGGCT CCGGGGAGG GGCCTGGATT GGTCTCAGCT
160     170     180     190     200
ATTACTGCTA GTGCTGGTAG CACATAGTAC GCAGACTGCG TGAAGGCGG
210     220     230     240     250
GTTTACCAAC TCCAGAGACA ATTCCAGAGA CACCTGTGAT CTGCAATGA
260     270     280     290     300
ACAGCTTGG AGCTGGGAC AGGCGCTAT ATTACTGTG CAAAGATGG
310     320     330     340     350
AGTTTATTA CTMPGAGAT AGTGGTACA TGGGGCAGG GAGCCTGCT
360
CACGTCATC TCA 3'

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10      20      30      40      50
5' GACATCCAGA TGACCAATC TCACTCTCC CCGTCTGAT CTATCGGMA
60      70      80      90     100
CAGACTCAC ATCACTTGC GGGCAAGTCA CAGCTTAGC AGCTATTTA
110     120     130     140     150
ATTGTTATCA CGGAGAGCA GGGAAAGCC CTAACTCTT GATCTATGT
160     170     180     190     200
GCACTCAATT TGCAACTGG GGTCCATCA AGTTCTAGT GCAATGATC
210     220     230     240     250
TGGACAGAT TTACTTCA CCAACAGAG TCTGCAACT GAGATTTG
260     270     280     290     300
CAACTTACTA CTGTCAACG AGTATAGTA CCGGTACAG TTTAGGCGC
310     320
GGGACCAAGC TGAAGTCAA A 3'

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ABSTRACT : PROBLEM TO BE SOLVED: To obtain a new antibody cDNA coding for a variable region of a heavy chain of an antibody, having specific nucleotide sequences, and used for the gene engineering-based production of a monoclonal antibody capable of being utilized for the diagnosis of a cancer, application for an immunological therapy, the purification of a cancer specific antigen, etc.

SOLUTION: This cDNA coding for a variable region of a heavy chain of an antibody is a new cDNA coding for a human monoclonal antibody containing a nucleotide sequences expressed by formula I, and another cDNA coding for a variable region of a light chain of an antibody is also a new DNA coding for a human monoclonal antibody containing sequences expressed by formula II. These cDNA's are useful for the gene engineering-based production of a human monoclonal antibody useful for application in a medical field such as the clinical diagnosis of a cancer, an immunological therapy, the purification of a cancer specific antigen, etc. These cDNA's are obtained by extracting mRNA from a human-human hybridoma prepared by fusing a human lymphocyte immunized in vitro by using a cancer cell line, with the cancer cell line, synthesizing the cDNA and then cloning with a PCR method.

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